

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. - 43. (Canceled)

44. (Currently Amended) A composition consisting of a recombinant modified Ankara (MVA) vector into which is inserted within excisions II and/or III DNA sequences coding for (i) the early E6 polypeptide of a papillomavirus; (ii) the early E7 polypeptide of a papillomavirus; (iii) the late L1 polypeptide of a papillomavirus; and (iv) the late L2 polypeptide of a papillomavirus; and (v) a polypeptide having an immunostimulatory activity;

wherein each of said DNA sequences is placed under the control of the independent elements necessary for its expression in a host cell or organism and wherein said polypeptide having an immunostimulatory activity is selected from the group consisting of interleukin-2, interleukin-7, and the co-adhesion molecule B7.2; and

wherein said recombinant MVA vector is provided in combination with a pharmaceutically acceptable carrier.

45. (Canceled)

46. (Previously Presented) The composition of claim 44, wherein the polypeptide having an immunostimulatory activity is interleukin-2.

47. (Canceled)

48. (Currently Amended) The composition of claim 44, consisting of one recombinant vector into which is inserted:

a DNA sequence coding for the E6 polypeptide of a papillomavirus, a DNA sequence coding for the E7 polypeptide of a papillomavirus, a DNA sequence

coding for the L1 polypeptide of a papillomavirus, a DNA sequence coding for the L2 polypeptide of a papillomavirus and a DNA sequence coding for interleukin-2,

wherein said DNA sequence coding for the E6 polypeptide of a papillomavirus, said DNA sequence coding for the E7 polypeptide of a papillomavirus, and said DNA sequence coding for interleukin-2 are inserted within excision III of said recombinant vector, and wherein said DNA sequence coding for the L1 polypeptide of a papillomavirus and said DNA sequence coding for the L2 polypeptide of a papillomavirus are inserted within excision III of said recombinant vector.

49. (Previously Presented) The composition of claim 48, wherein said E6 or E7 or both E6 and E7 polypeptides are, respectively, nononcogenic variants of the native E6 and E7 polypeptides of a human papillomavirus,

wherein said nononcogenic variant of the E6 polypeptide is the native HPV-16 E6 polypeptide deleted of amino acids 111-115; and

wherein said nononcogenic variant of the E7 polypeptide is the native HPV-16 E7 polypeptide deleted of amino acids 21-26.

50. - 54. (Canceled)

55. (Previously Presented) A method for the treatment of dysplasia or cancer of the neck of the uterus, comprising administering an effective amount of the composition of claim 44 to a patient in need of such treatment.

56. (Previously Presented) A method for the treatment of a papillomavirus infection, comprising administering an effective amount of the composition of claim 44 to a patient in need of such treatment.

57. - 61. (Canceled)

62. (Previously Presented) The composition of claim 44, wherein said elements necessary for the expression of the DNA sequences comprise a promoter

selected from the group consisting of the promoters of the thymidine kinase (TK), 7.5K, H5R and K1L genes.

63. - 64. (Canceled)

65. (Currently Amended) A composition consisting of a recombinant modified Ankara (MVA) vector into which is inserted within excision II or III DNA sequences coding for (i) the E6 polypeptide of a papillomavirus (ii) the E7 polypeptide of a papillomavirus and (iii) a polypeptide having an immunostimulatory activity; each of said DNA sequences being placed under the control of independent elements necessary for its expression in a host cell or organism and wherein said polypeptide having an immunostimulatory activity is selected from the group consisting of interleukin-2, interleukin-7, and the co-adhesion molecule B7.2; and wherein said recombinant MVA vector is provided in combination with a pharmaceutically acceptable carrier.

66. - 68. (Canceled)

69. (Previously Presented) The composition of claim 65, wherein said elements necessary for the expression of the DNA sequences comprise a promoter selected from the group consisting of the promoters of the thymidine kinase (TK), 7.5K, H5R and K1L genes.

70. - 71. (Canceled)

72. (Previously Presented) The composition of claim 65, wherein the polypeptide having an immunostimulatory activity is interleukin-2.

73. (Previously Presented) The composition of claim 65, wherein said papillomavirus polypeptide is the E6 or the E7 or the E6 and E7 polypeptide of a human papillomavirus.

74. (Currently Amended) The composition of claim 65, consisting of one recombinant MVA vector into which is inserted within excision III a DNA sequence coding for the E6 polypeptide of HPV-16, a DNA sequence coding for the HPV-16 E7 polypeptide and a DNA sequence coding for interleukin-2.

75. (Previously Presented) The composition of claim 65, wherein said E6 or E7 or both E6 and E7 polypeptides are, respectively, nononcogenic variants of the native E6 and E7 polypeptides of a human papillomavirus,

wherein said nononcogenic variant of the E6 polypeptide is the native HPV-16 E6 polypeptide deleted of amino acids 111-115, and

wherein said nononcogenic variant of the E7 polypeptide is the native HPV-16 E7 polypeptide deleted of amino acids 21-26.

76. - 78. (Canceled)

79. (Previously Presented) A method for the treatment of dysplasia or cancer of the neck of the uterus, comprising administering an effective amount of the composition of claim 65 to a patient in need of such treatment.

80. (Previously Presented) A method for the treatment of a papillomavirus infection, comprising administering an effective amount of the composition of claim 65 to a patient in need of such treatment.